

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Advanced Methods to Target and Eliminate)	CG Docket No. 17-59
Unlawful Robocalls)	
)	

**REPLY TO COMMENTS OF USTELECOM – THE BROADBAND
ASSOCIATION**

Eliot Steele Robinson doing business as Robinson Management Service (“RMS”) replies to USTELECOM comments dated January 31, 2022. RMS and its client were delayed by more than one month in identifying and correcting erroneous blocking because of woefully inadequate and inconsistent identification of why the calls were blocked and who blocked the calls. In this case, all calls from a bank using a VOIP service provider to a cell phone number were blocked but calls from other cell phones went through. Comments from other interested parties clearly demonstrate the need for immediate action. Much work has been done including the development of IETF and ITU-T standards and relevant IETF and ITU-T standards already exist.

If technology limited terminating carriers and their equipment vendors do not want to fully implement SIP codes 607 and 608, the least they can do is to send IETF RFC 8688 SIP response code 608 for their automated call rejections. If these terminating carriers are incapable of following RFC 8688 to use the Call-Info header field to provide contact information for entities blocking calls, then the contact will be the carrier itself.

SIP reason code 603 should not be used by terminating carriers for automated, analytics based call rejections as it adds to the confusion. SIP reason code 603 is defined by IETF RFC 3261 to include only **USER** rejections.

EITF and ITU-T standards exist to identify and notify callers of blocking:

1. IETF standards:

- a. Rosenberg, J., Schulzrinne, H., Camarillo, G., Johnston, A., Peterson, J., Sparks, R., Handley, M., and E. Schooler, "SIP: Session Initiation Protocol", RFC 3261, DOI 10.17487/RFC3261, June 2002, <<https://www.rfc-editor.org/info/rfc3261>>. RFC 3261 defines SIP response code 403 Forbidden as: "The server understood the request, but is refusing to fulfill it. Authorization will not help, and the request SHOULD NOT be repeated." SIP response code 603 Decline is defined as "The callee's machine was successfully contacted but the user explicitly does not wish to or cannot participate. The response MAY indicate a better time to call in the Retry-After header field. This status response is returned only if the client knows that no other end point will answer the request." As noted above, Sip response code 603 applies to **USER** rejections only.
- b. Schulzrinne, H., Oran, D., and G. Camarillo, "The Reason Header Field for the Session Initiation Protocol (SIP)", RFC 3326, DOI 10.17487/RFC3326, December 2002, <<https://www.rfc-editor.org/info/rfc3326>>. RFC 3326 provides a Reason header field that answers the question why a SIP request was issued. The Reason field contains a protocol such as SIP or Q.850, a cause number and cause text.
- c. Camarillo, G., Roach, A., Peterson, J., and L. Ong, "Integrated Services Digital Network (ISDN) User Part (ISUP) to Session Initiation Protocol (SIP) Mapping", RFC 3398, DOI 10.17487/RFC3398, December 2002, <<https://www.rfc-editor.org/info/rfc3398>>. "This document describes a way to perform the mapping between two signaling protocols: the Session Initiation Protocol (SIP) and the Integrated Services Digital Network (ISDN) User

Part (ISUP) of Signaling System No. 7 (SS7). This mechanism might be implemented when using SIP in an environment where part of the call involves interworking with the Public Switched Telephone Network (PSTN)."

- d. Jesske, R. and L. Liess, "Carrying Q.850 Codes in Reason Header Fields in SIP (Session Initiation Protocol) Responses", RFC 6432, DOI 10.17487/RFC6432, November 2011, <<https://www.rfc-editor.org/info/rfc6432>>. RFC 6432 describes the use of Reason header field in SIP responses to carry ITU-T Q.850 cause codes.
- e. Jesske, R., "ISDN User Part (ISUP) Cause Location Parameter for the SIP Reason Header Field", RFC 8606, DOI 10.17487/RFC8606, June 2019, <<https://www.rfc-editor.org/info/rfc8606>>. RFC 8606 updates RFC 6432 to add ISUP location parameter to correctly interpret the reason of release. This RFC provides Q.850 isup-location-values such as "U" for user, "LPN" for private network serving the local user, "LN" for public network serving the local user, "RLN" for public network serving the remote user and "RPN" for private network serving the remote user.
- f. Schulzrinne, H., "A SIP Response Code for Unwanted Calls", RFC 8197, DOI 10.17487/RFC8197, July 2017, <<https://www.rfc-editor.org/info/rfc8197>>. RFC 8197 defines 607 (Unwanted) SIP response code. This allows the called party to identify a call as unwanted.
- g. Burger, E. and B. Nagda, "A Session Initiation Protocol (SIP) Response Code for Rejected Calls", RFC 8688, DOI 10.17487/RFC8688, December 2019, <<https://www.rfc-editor.org/info/rfc8688>>. RFC 8688 defines 608 (Rejected) SIP response code. "This response code enables calling parties to learn that an intermediary rejected their call attempt. ... The initial use case driving the need for

the 608 response code is when the intermediary is an analytics engine. This contrasts with the 607 (Unwanted) SIP response code in which a human at the target User Agent Server indicates the user did not want the call.” Redress for blocked callers is provided with a redress address in the Call-Info header field passed back to the UAC. For application-layer integrity, jCard is used. Legacy interoperability for UAC that do not understand 608 SIP response code is also addressed.

2. ITU-T Standards

- a. Q.850 – Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signaling System No. 7 ISDN user part.
- b. Q.850 Amendment 1 (04/2019) – Table 1 – Cause information element/parameter lists inter alia No., Definition, and Location. Cause definitions include 6.2.7.1.16 Cause No. 21 – Call rejected
 - i. This cause indicates that the equipment sending this cause does not wish to accept this call, although it could have accepted the call because the equipment sending this cause is neither busy nor incompatible.
 - ii. This cause may also be generated by the network, indicating that the call was cleared due to a supplementary service constraint. The diagnostic field may contain additional information about the supplementary service and reason for rejection.

Q.850 Amendment 1 also provides rules for handling of the location field, Figure 4 – Reference configuration for location field generation and Table 4 – settings of location fields. Rejections by users are identified by a location code “U” and by networks serving the remote user by “RLN” or “RPN”.

Cause 21 Call Rejected can be mapped by a session border controller (SBC) to SIP Code 607 if location field is “U” or SIP Code 608 if location field identifies a network location field.

To avoid confusion as to who blocked calls, these standards must be followed to provide uniform methods of communicating blocking for SIP and TDM.

Respectfully submitted,

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